

24

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/501,834  
Source: P4110  
Date Processed by STIC: 10/28/05

# ***ENTERED***



PCT

## RAW SEQUENCE LISTING

DATE: 10/28/2005

PATENT APPLICATION: US/10/501,834

TIME: 10:02:11

Input Set : A:\PTO.RJ.TXT

Output Set: N:\CRF4\10282005\J501834.raw

4 <110> APPLICANT: Harris, Peter C., Ward, Christopher J., Rossetti, Sandro, and Torres,  
 5 Vicente E.  
 7 <120> TITLE OF INVENTION: Polycystic Kidney Disease Nucleic Acids  
 8 and Proteins  
 10 <130> FILE REFERENCE: 07039/386US1  
 12 <140> CURRENT APPLICATION NUMBER: 10/501,834  
 13 <141> CURRENT FILING DATE: 2004-7-19  
 15 <150> PRIOR APPLICATION NUMBER: PCT/US03/02038  
 16 <151> PRIOR FILING DATE: 2003-01-23  
 18 <150> PRIOR APPLICATION NUMBER: 60/351,110  
 19 <151> PRIOR FILING DATE: 2002-01-23  
 21 <160> NUMBER OF SEQ ID NOS: 221  
 23 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 25 <210> SEQ ID NO: 1  
 26 <211> LENGTH: 12225  
 27 <212> TYPE: DNA  
 28 <213> ORGANISM: Homo sapien  
 30 <400> SEQUENCE: 1  
 31 atgactgcct ggctgatctc tctgatgagt attgaagtac tacttttggc agtacgtcac 60  
 32 ctgagtttac atattgaacc tgaagaaggt agccttgacg ggggaacgtg gatcacagtc 120  
 33 attttttgatg gtttgaggtt ggggtgttctt taccccaaca atggctctca attggagata 180  
 34 cacctgggtga acgtgaacat ggtgggtgcc gcactgcgga gtgttcctctg tgacgtcttt 240  
 35 cctgttttct tggatttgcc tgtgggtgaca tgccggacca gatctgtgct gtctgaagca 300  
 36 catgagggtc tgtacttcct ggaagcatatc ttccgggggac agctggtaag cagtccaaat 360  
 37 ccaggaccac gagatagctg tacttttcaag ttttccaagg cgcagacacc catcggtcac 420  
 38 caagtttatc caccaagtgg tgttccagga aaactaatac atgtatatgg ctggattatc 480  
 39 actggaagat tggaaacttt tgattttgat gctgagtaca ttgatagccc agtgcatttg 540  
 40 gaagctcaag gagacaaatg ggtaactcct tgcctctctta taaataggca gatgggaagc 600  
 41 tgttatccta ttcaggagga ccatggtcct gggactctgc agtgccatgt ggaaggcgac 660  
 42 tacatcggct ccagaatgt tagcttctca gtatttaaca aaggaaagtc aatggtccac 720  
 43 aagaaggcat ggctgatcag tgctaaacag gatcttttcc tataccagac aactcagaa 780  
 44 atattatctg tgtttccaga aactgggagc cttgggggaa gaacaaacat cacaattaca 840  
 45 ggagactttt ttgacaattc tgcccagggt accattgcag gcattccatg tgatattaga 900  
 46 cacgtgtctc ccaggaagat tgagtgcacc actcgggctc caggaaaaga tgtgaggctc 960  
 47 accaccctc agccaggcaa tcgagggtct ctttttgaag ttggagatgc tgttgaggga 1020  
 48 ctggaactga ctgaagccac ccagggtac aggtggcaga ttgtccctaa tgccagttct 1080  
 49 ccatttgggt tttggtcaca ggaaggacaa cctttcagag cagggtcag tgggttcttt 1140  
 50 gtggctccag agacaaataa ttacactttc tggattcagg cagatagcca agcttccttg 1200  
 51 catttcagtt ggtcagagga accaaggact aagggtgaaag tggcctccat cagcgctcggc 1260  
 52 actgctgact ggtttgactc ctgggagcag aatagggatg aaggggacctg gcagcagaag 1320  
 53 actcccaagt tggagctgtt ggggtggagcc atgtactacc tgggaagcaga gcatcatggg 1380  
 54 atagccccaag gcagggggat gaggattggt gtccagattc acaacacctg gctgaatcct 1440  
 55 gatgtggtca ccacttacct acggggagaag caccagatcc gagtccgagc ccagaggctt 1500

## RAW SEQUENCE LISTING

DATE: 10/28/2005

PATENT APPLICATION: US/10/501,834

TIME: 10:02:11

Input Set : A:\PTO.RJ.TXT

Output Set: N:\CRF4\10282005\J501834.raw

56	ccagaagtac	aggtgctgaa	tgtatcaggc	agaggaaact	tcttccttac	ttgggacaat	1560
57	gtctctagtc	agccaatccc	tgcaaatgcc	acagcccata	tgattcaaac	aaccattgag	1620
58	gagttacttg	cagtaaaatg	caaactggaa	cccccttggt	ctaacatcct	tctccggctt	1680
59	ggatttgaac	gaggcccaga	agtttccaac	tctgatgggg	acctcaccag	tgggacggag	1740
60	cccttctgtg	gcaggttcag	cctccgtcag	cctcgacacc	ttgtccttac	tccccggct	1800
61	gcccagaagg	gctatcgggt	agatcagtat	acacacctgt	gtcttgcata	caaaggccac	1860
62	atgaacaaga	tcctgaagat	gatttgtgtc	ttcacaaatc	gctttcaaaa	catggtaaag	1920
63	aataccacct	gtgactggag	tctcacggag	accagccccg	agagctggca	gttcgattgc	1980
64	actgacctct	gggagacttg	tgtgcgttgc	ttcggggatc	tccagcccc	tccggcaaac	2040
65	tccccagtgc	tggttcatca	gatcaacctt	ctccctctgg	cccaggagac	gggctgttc	2100
66	tatgtggatg	aaattattat	tgcagacaca	aacgtaacag	tttctcaage	tgattctgga	2160
67	acggctcgcc	cagggggcaa	tctggtggaa	tcagtctctg	tgggtgggatc	ccctccggtc	2220
68	tacagtgtca	cctcctggct	ggcgggggtg	ggcacggagc	tcccgtcat	cactgcacgc	2280
69	tctgtgcccc	ctgaaggaa	agaagaggga	tctggactgg	tctgggtgac	gacacagaga	2340
70	cgacagcgga	caagtccacc	tctaggagga	cactttcgca	tccagcttcc	taatacagtg	2400
71	atttctgatg	tccctgtaca	aatttctgct	catcaccttc	accagctctt	acagaataat	2460
72	gccgatgact	tcacatccag	gtacctcaat	gccagtgact	tcaactgtga	ggaggatcta	2520
73	tacacttgct	acgaacacgt	gtggaccttg	tctgggtcca	ctcagattgg	ggatttgccc	2580
74	aattttatca	gggtctctga	tgaaaacctt	actggagtga	atcctgctgc	agccacgcgt	2640
75	gtggtatatg	atggtggagt	ttttcttgga	cccataattg	gagacatggt	ggctactgcc	2700
76	aaccagcata	ctcaggtggg	tgtgcgagtg	aatgatgtac	cagtcatttg	cccaggttcc	2760
77	tgctctttcc	agtacctcca	aggggtcaact	cctgtgtctc	attctgtgtg	gtactccatt	2820
78	gatgggtgaca	tcaacctaat	gatttacatt	accggaactg	gtttctctgg	tgactccag	2880
79	ttcttgccagg	ttacagtga	caaaacgagt	tgcaaaagta	ttttctcaaa	ccagaccaat	2940
80	gtagtctgtc	agacagattt	gctacctgtt	ggaatgcata	ggatcttgat	gttgggtgaga	3000
81	ccctctgggtc	ttgccatcag	tgccactgga	gaagacctct	tccataaatgt	gaaacctaga	3060
82	ctggatatgg	tggagccttc	cagagctgcg	gatattggag	ggctctgggc	caccatccga	3120
83	ggctctagtt	tgggaagggt	tagcctgata	ttatttggat	cttactcgtg	tgccatcaat	3180
84	gtcgctacaa	gcaattcaag	cagaattcag	tgcaaaagttc	caccacgggg	gaaagatgga	3240
85	cgcattgtga	atgtgactgt	gatcagaggg	gactattctg	cagttcttcc	cagagcattt	3300
86	acatatgtct	cttccttaaa	tccagttatt	gtgactctga	gcagaaacat	aagcaatata	3360
87	gcaggcgggtg	agaccttggt	cattggagtg	gcgaggctga	tgaactatac	ggatttggtg	3420
88	gtggaagtcc	acgtccagga	tgccctgggt	ccggttcaca	cacagtccgc	ttggggcctg	3480
89	gaggtggcac	tgccccact	gccagctggt	ctccacagaa	tttccgtctc	tatcaatggg	3540
90	gtcagcattc	actcacaagg	ggttgatctc	cacatccagt	acctcacaga	agttttcagc	3600
91	atcgagcctt	gctgtgggtc	cctgctggga	gggaccatcc	tcagcatctc	aggaataggc	3660
92	ttcagcaggg	acccagcttt	ggtttgggta	cttgtgggca	atcggctctg	tgacattgtg	3720
93	aacttaacgg	aggcgagcat	ctgggtgtga	accctgccag	ccccccagat	acccgatgcg	3780
94	ggcgctccca	ctgttccagc	tgccgtggag	gtctgggctg	gcaacagggt	cttcgcccgt	3840
95	ggctcttcac	caagcttggt	ggggaaaggc	ttcaccttca	tgtatgaagc	ggcagcaaca	3900
96	ccagtagtca	ctgccatgca	aggagaaatc	acaaatagca	gcctgagcct	gcatgtggga	3960
97	ggaagtaacc	tctccaactc	agtcatacct	ctggggaaacc	tgaactgtga	tgttgagaca	4020
98	cagtccttcc	agggcaacgt	gagcctgtct	ggatgctcca	tccctcttca	cagtctggag	4080
99	gctggcatct	atcctctcca	agtaagtcag	aagcagatgg	gatttgctaa	tatgtctgtg	4140
100	gtgctccagc	aatttgcagt	gatgcctcgg	ataatggcca	tcttcccatc	gcagggttgc	4200
101	gcatgtgggtg	ggaccatact	tactgtgagg	gggttgcttc	ttactctag	aaggagggtca	4260
102	gttcgggttg	acctctcggg	tccttttact	tgtgtgattt	tgagtttggg	agaccacacc	4320
103	attctctgcc	aggttagcct	ggaggggtgac	cccttgcttg	gagcttctct	ctccctgaac	4380
104	gtcacagtcc	tgggtcaatgg	gctaaccagc	gagtgtcagg	ggaattgcac	tcttttcata	4440

## RAW SEQUENCE LISTING

DATE: 10/28/2005

PATENT APPLICATION: US/10/501,834

TIME: 10:02:11

Input Set : A:\PTO.RJ.TXT

Output Set: N:\CRF4\10282005\J501834.raw

105	aggggaagagg	caagtccctgt	catggatgcc	ttgtccacaa	acaccagtgg	gtctctgacc	4500
106	actgtgctga	ttaggggtca	gaggttagcc	accacagctg	atgagccgat	ggatattgtg	4560
107	gatgatcaac	ttccttgcaa	tgtaactttt	tttaatgcaa	gccacgttgt	gtgccagaca	4620
108	agagacttgg	ccccaggacc	ccactacctg	tcagtttttt	atacaagaaa	tgggtatgct	4680
109	tgttctggta	atgtttccag	acacttctac	attatgcccc	aagtgtttca	ttattttcct	4740
110	aagaatttca	gcttacatgg	tggagacctc	ttgaccatag	agggcacagg	cctgagagga	4800
111	cagaacacca	cgctcagtcta	tattgaccag	cagacctgcc	tgacggtgaa	catcggtgct	4860
112	gagctcatcc	gggtgcattgt	tcccacaggg	aatggctctg	ttgccctgga	aatagaggta	4920
113	gatggacttt	gggtatcacat	aggagtcatt	ggttataaca	aggcctttac	cccagaattg	4980
114	atctctattt	ctcagagcga	tgacatctta	acctttgcag	tggcccagat	ctcaggagct	5040
115	gcaaacattg	acatttttat	aggaatgtca	ccctgtgtgg	gtgtctctgg	taaccacacc	5100
116	gttcttcagt	gcgtgggtccc	ttcccttcog	gcccggggagt	accacgtcag	aggctatgac	5160
117	tgcacagag	gggtgggcctc	atctgcccctg	gtgttcacct	caagagttat	tattacagca	5220
118	gtgacggaga	acttcggctg	cctgggtgga	aggctggtgc	atgtgtttgg	agcgggattt	5280
119	tctccaggga	atgtctcagc	tgtgtgtgtg	gggtgtccct	gccgagtcct	ggctaattgt	5340
120	acagtgtctg	ccttcagctg	cttggttctg	ccoctggatg	tgtccttggc	cttctgtgtg	5400
121	ggcctgaagc	gtgaggagga	cagctgtgag	gctgccagac	acacctatgt	gcagtgtgat	5460
122	ttgacagttg	ccatggcgac	agagcaactg	cttgaatcgt	ggccttacct	ctacatttgc	5520
123	gaggaaagtt	cccaatgcct	ctttgtgcca	gatcattggg	cagagtcaat	gtttccatca	5580
124	ttctcgggcc	tctttatcag	ccctaaattg	gaaagagatg	aagttctcat	ctataatagc	5640
125	tctgttaaca	ttaccatgga	aactgaggca	gagatggagt	gtgagacgcc	caatcagcca	5700
126	attaccgtca	agattactga	gatacggaaa	cgtcggggcc	agaacactca	gggcaacttt	5760
127	tctttacagt	tctgcccggag	atggtccagg	actcacagct	ggtttctga	aaggctgcca	5820
128	caagatggcg	acaacgtcac	agtggagaat	ggccaattgc	ttctgctgga	cactaacaca	5880
129	agcatcctca	acttactgca	cattaaaggg	ggcaagctga	ttttcatggc	cccaggaccc	5940
130	atcgagctca	gggcacacgc	catccttgtt	tctgatgggtg	gagagctccg	gattggatcc	6000
131	gaagacaagc	ccttccaagg	cagagctcag	atcacactct	acgggagttc	ctactcaact	6060
132	cccttctttc	cctatggagt	caagtctctg	gctgtgagga	atggaactct	ttctctgcac	6120
133	ggttcactac	cagaagtaat	tgtcacctgt	cttagagcaa	ctgcccctgc	cctagacaca	6180
134	gtgctggctt	tagaagatgc	tgtggactgg	aaccctgggg	atgaagttgt	catcatcagt	6240
135	ggaacagggtg	ttaaagggtgc	caaaccgatg	gaagagattg	tactgtgga	aactgtgcag	6300
136	gatacagacc	tctatcttaa	gtcacctttg	agatattctc	acaactttac	agagaattgg	6360
137	gtggctggag	agcaccatat	tttaaaggcc	actgtggctc	tgtcagcag	gagtattacc	6420
138	atacaaggaa	atctcactaa	tgagagggag	aagctgcttg	tttcatgcca	ggaggccaat	6480
139	gctccagaag	gtaatctgca	gcactgtttg	tattccatga	gtgagaagat	gctaggatcc	6540
140	agggatatgg	gagccagagt	gategttcag	tccttcccag	aagagcccag	ccaggctccag	6600
141	ttgaaggagg	tgacgtttca	agtcttgggg	caagccttcc	ataagcatct	gagctcactc	6660
142	actctgggtg	gagctatgag	agagtctttc	atacagggct	gcacagtgag	gaactccttc	6720
143	agtagaggcc	tcagcatgtg	cgggaccttg	ggcctgaagg	tggacagtaa	tgtattctac	6780
144	aatattttag	gtcatgcgct	gctagtggg	acatgcacgg	agatgagata	tatctcctgg	6840
145	gaggcaattc	atggaaggaa	agatgactgg	tcaggacatg	gaaatataat	aagaaacaac	6900
146	gtgatcatcc	agggtttctg	tgccgaggga	ctctccaatc	ctgaaatgtt	gacaccatct	6960
147	ggcatctata	tctgcagtc	caccaatgtt	atagagggga	acagagtgtg	tgggtgctggc	7020
148	tatggctact	ttttccatct	catgaccaac	caaacatcac	aagctccgct	tctttccttc	7080
149	actcagaaca	ttgcacattc	ttgtaccagg	tatggtctct	ttgtataccc	taaatttcag	7140
150	ccaccttggg	ataatgtcac	tggcaccact	ctgttccaga	gcttcacagt	ttgggaaagt	7200
151	gcagggtggg	cccagatttt	tagaagtagc	aatcttcgcc	tgaaaaactt	caaagtttat	7260
152	tcatgcagag	atthttggaat	tgacgtcttg	gaaagtgatg	caaatacttc	agttactgac	7320
153	agcttattac	ttgggtcattt	tgcccacaag	ggaagtctgt	gtatgtcatc	tgggattaaa	7380

## RAW SEQUENCE LISTING

DATE: 10/28/2005

PATENT APPLICATION: US/10/501,834

TIME: 10:02:11

Input Set : A:\PTO.RJ.TXT

Output Set: N:\CRF4\10282005\J501834.raw

154	actcctaaaa	gatgggaact	gatggtgtct	aacacaacct	ttgttaattt	tgatctcatc	7440
155	aactgtgtgg	ccattagaac	ctgttcagac	tgttcccaag	gacaaggtgg	atttactgtg	7500
156	aagaccagcc	agttgaagtt	tacaaactct	tcaaacttag	tggcatttcc	atttctcat	7560
157	gcagcaattt	tggaagactt	ggatgggtct	ctgtctggga	aaaacagaag	tcacattctt	7620
158	gcttctatgg	aaaccctttc	agcttcttgt	ttggtcaatt	caagctttgg	tcgggttgct	7680
159	catggcagtg	cctgtggagg	aggtgttctt	tttcatcgta	tgtctattgg	tttagcgaat	7740
160	actcctgaag	tttcttatga	tttaaccatg	actgacagca	gaaataaaac	aaccactgtc	7800
161	aattatgtac	gtgatacatt	gtctaaccct	cgtggctgga	tggctctgct	cttggaccaa	7860
162	gagacctact	cattgcaatc	tgagaacctt	tggatcaaca	gatctctgca	gtactcagca	7920
163	acctttgaca	actttgtctc	tggttaattac	ctactgctgg	tgcacacaga	tttgccgctt	7980
164	tacctgaca	tcctcctaag	atgtgggagt	cgagtgggtc	tgtcttttcc	atttcttcca	8040
165	tcaccaggtc	agaaccaagg	ctgtgactgg	ttcttcaata	gccagctgag	gcaactcacc	8100
166	tatctggttt	caggtgaagg	ccaagttcaa	gtcattctcc	gggtgaagga	aggtatgcc	8160
167	ccaactatth	cagcttctac	ctctgccctt	gaatcagctt	taaaatgggtc	cctccctgaa	8220
168	acatggcaag	gtgttgaaga	aggctgggga	ggatacaaca	ataccattcc	aggccctggg	8280
169	gatgacgttc	tcattttacc	caacagaact	gtccttgtgg	atacagatct	tccattcttc	8340
170	aaagggctgt	atgtgatggg	gaccttagac	ttccctgtgg	acagaagcaa	tggtctgagt	8400
171	gtggcatgca	tggtcattgc	aggcggggag	ctgaaagttg	gtactttaga	aaatccctta	8460
172	gaaaaggaac	aaaagcttct	gattctcctt	agagcctcag	agggagtctt	ttgtgaccgt	8520
173	atgaatggaa	ttcatattga	cccaggaaca	attgggggtt	atgggaaagt	tcactcttac	8580
174	agtgtttatc	ctaagaactc	ctggacacat	cttggagctg	atattgcctc	aggaaatgag	8640
175	agaattatag	tagaagatgc	agtggattgg	cgcccccatg	acaaaatagt	ccttagctcc	8700
176	tcttcttatg	agcctcatga	agcagaggtc	ctcactgtga	aagaagtcaa	gggccaccat	8760
177	gtgaggatct	atgaacggct	caaacaccgg	catattggaa	gtgtacatgt	cacggaggat	8820
178	ggccgacaca	ttcgtttggc	tgctgaggtt	ggactgttga	cccgaatat	acaaattcag	8880
179	cctgacgtat	catgtagggg	gagactgttt	gtggggctct	tcagggaagtc	cagccgagaa	8940
180	gaattttcag	gtgtccttca	acttcttaat	gtggaaattc	agaacttcgg	gtcaccattg	9000
181	tactcatctg	ttgaattcag	taatgtgtca	gcaggatcct	ggatcatatc	atctactctg	9060
182	caccagagct	gtggcggggg	cattcatgca	gctgccagtc	atggagtact	tttaaattgac	9120
183	aatattgtgt	ttggcacagc	tggccatggc	atagatttag	agggtcaggc	ctatactgtc	9180
184	actaataacc	ttgtgggtct	gatgacacag	ccagcgtggt	ccaccatttg	gggtggcggga	9240
185	atcaaagtga	accaggtaaa	ggacatcaac	ctccatggca	acgttgtggc	aggatcagag	9300
186	agacttggct	ttcacatccg	aggccacaag	tgctcctctt	gtgaactgct	ttggtctgac	9360
187	aatgtggcgc	attcaagtct	tcattggcctt	catctctata	aggaaagtgg	acttgacaac	9420
188	tgtaccagaa	tctctggctt	cttggctttc	aagaactttg	actatggtgc	catgttacat	9480
189	gtagagaaca	gcgtggagat	agagaacatt	actctggtag	acaatactat	tggtcttttg	9540
190	gcagtagtgt	atgtattttc	tgctccacaa	aattccgtca	aaaaagtgca	gattgtgctt	9600
191	aggaattcag	tcattgtggc	caccagctct	tcttttgact	gcattcagga	caaagtgaag	9660
192	ccgcactcag	ccaacttgac	atcaacagat	agagctccct	ccaatccaag	aggaggtcga	9720
193	attgggtatc	tgtggcctgt	attcacctca	gaaccaaate	agtggcctca	ggagccatgg	9780
194	cacaaagtga	ggaatgatca	ttcaatttca	ggaatcatga	aacttcaaga	tgttaccttt	9840
195	tctagttttg	tgaagagttg	ctatagcgat	gacctggatg	tctgcattct	accaaattgca	9900
196	gagaacagtg	gaattatgca	cccaataaca	gcagagagga	ccaggatgct	aaagataaaa	9960
197	gataaaaaca	agttctactt	tccttcatta	caaccagga	aagatttagg	aaaagtatgc	10020
198	tgtcctgaat	tagactgtgc	aagtccaaga	aaatatctct	tcaaggatct	ggatgggaga	10080
199	gccctgggtc	tgctccacc	agtttctgta	tttctaaaa	cagaggcaga	atggactgca	10140
200	tccttcttca	acgcaggtac	atthagagaa	gaacagaaat	gtacatacca	atttctgatg	10200
201	caaggattca	tctgcaaaca	gactgacca	gtggctcctaa	ttcttgatag	cgctgatgcc	10260
202	atttgggcaa	ttcagaagtt	atatccagtt	gtatctgtga	ctagtggttt	tggtgatgtc	10320

## RAW SEQUENCE LISTING

DATE: 10/28/2005

PATENT APPLICATION: US/10/501,834

TIME: 10:02:11

Input Set : A:\PTO.RJ.TXT

Output Set: N:\CRF4\10282005\J501834.raw

```

203 ttttagcagtg taaatgccaa tattccctgc tctactttctg ggtcagtgtc tacttttctat 10380
204 tctatcttac ccatcaggca aatcaccaaa gtctgcttca tggatcaaac tcctcaagtt 10440
205 ttgcgctttt ttctattggg gaacaaaagt acctccaagc ttctcttggc tgtattctac 10500
206 catgagctcc agagccccc cgtcttctta ggggaaagt ttattccacc cactctgggt 10560
207 cagtcagctt ccttattgct gaatgaatct attggtgcc actatttcaa catcatggat 10620
208 aacctcttgt atgttgctct acaaggagag gagccattg aaatacgctc aggtgtttcc 10680
209 attcacttgg cctcactgt gatggtttca gtcttagaaa aaggctggga aatagtaata 10740
210 ctcgaaagac taactaactt cttacagatt ggccaaaacc aaatcagggt tattcacgag 10800
211 atgcctggcc atgaagagac cttaaaggcc attgctgaca gtagagcaaa aagaaagcgc 10860
212 aattgcccta ctgtgacttg cactagtcat tatagaagag ttggtcaacg taggcctctc 10920
213 atgatggaaa tgaactcaca tagggcttca ccccaatga ctgtggaaac tatctcaaaa 10980
214 gtgattgtca ttgaaattgg tgattcgcca acagtaagga gcaactggaat gatttcatcc 11040
215 ttatcaagta acaaattaca gaatttggct catcgagtca tcaactgctc acagactggg 11100
216 gtactagaga atgttctgaa tatgactatc ggggccttac tagttactca gtcaaagggg 11160
217 gtcattggct atggaaatac aagcagtttt aaaactggga acttgatata tattcggccc 11220
218 tatgcacttt ccatcctagt ccagccttca gatggagaag tgggaaatga gcttccagt 11280
219 cagccacaat tggtatTTTT ggatgagcag aatcgaagag tagagtcctt gggacctcct 11340
220 tcagagccat ggacaatttc agcttccctg gaaggagcat cagactcagt gctaaaagg 11400
221 tgcaccagg cagaaactca agatggttat gttagcttct acaacttggc agtcttgatc 11460
222 tctgggtcaa actggcactt tatttttact gtcacttctc ctccaggagt caattttaca 11520
223 gctcgatcca agccatttgc tgtcttgctt gtgactagga aggagaagtc gaccatcatc 11580
224 ctggctgctt ccctgtcctc tgtggcctca tggctggctc tgagctgtct ggtgtgctgt 11640
225 tggcttaaaa gaagcaaaag cagaaaaaca aaacctgaag agattcctga atccagact 11700
226 aataatcaaa atattcatat ccacatctca tccaaacgcc gagaatcaca agggcccaaa 11760
227 aaagaagaca ctgtgggtggg agaagatatg agaatgaagg tcatgctggg caaggtgaac 11820
228 cagtgtcccc accagttgat gaatggagt tccagaagga aagttagccg ccacattgtc 11880
229 cgagaggaag aggtgctgtt gctgtcctt ggtactactg gcatcacatc ccatgggcac 11940
230 atctgtgctc caggtgctcc tgtcagcag gtgtacctgc aagagactgg gaactggaag 12000
231 gagggccaag agcagttgct cagataccag ctggcaggcc aaaatcagct gctgctgcta 12060
232 tgccagact tcagacaaga gaggcagcag ttgccagggc aaagtcggct gagtaagcaa 12120
233 agtggcagct tggggctttc ccaagagaag aaagcctcct gcggggccac tgaggcattc 12180
234 tgccttcatt cagtacaccc ggaaactatt caggagcaac tgtga 12225

```

236 &lt;210&gt; SEQ ID NO: 2

237 &lt;211&gt; LENGTH: 4074

238 &lt;212&gt; TYPE: PRT

239 &lt;213&gt; ORGANISM: Homo sapien

241 &lt;400&gt; SEQUENCE: 2

```

242 Met Thr Ala Trp Leu Ile Ser Leu Met Ser Ile Glu Val Leu Leu Leu
243 1 5 10 15
244 Ala Val Arg His Leu Ser Leu His Ile Glu Pro Glu Glu Gly Ser Leu
245 20 25 30
246 Ala Gly Gly Thr Trp Ile Thr Val Ile Phe Asp Gly Leu Glu Leu Gly
247 35 40 45
248 Val Leu Tyr Pro Asn Asn Gly Ser Gln Leu Glu Ile His Leu Val Asn
249 50 55 60
250 Val Asn Met Val Val Pro Ala Leu Arg Ser Val Pro Cys Asp Val Phe
251 65 70 75 80
252 Pro Val Phe Leu Asp Leu Pro Val Val Thr Cys Arg Thr Arg Ser Val
253 85 90 95

```

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 10/28/2005  
PATENT APPLICATION: US/10/501,834      TIME: 10:02:12

Input Set : A:\PTO.RJ.TXT  
Output Set: N:\CRF4\10282005\J501834.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:6; Xaa Pos. 2511,2981

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/501,834

DATE: 10/28/2005

TIME: 10:02:12

Input Set : A:\PTO.RJ.TXT

Output Set: N:\CRF4\10282005\J501834.raw

L:13 M:256 W: Invalid Numeric Header Field, Wrong Current FILING DATE:YYYY-MM-DD

L:1278 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:6

L:1591 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:2496

L:1651 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:2976